ILLUMINATING GLASSWARE

GILLINDER-BROTHERS-INC

PORT-JERVIS-NEW-YORK

FOREWORD

For use in the selection of illuminating glassware on commercial lighting installations, including schools, hospitals, churches, offices and other public buildings, GILLINDER BROTHERS, INC., have prepared this Catalogue.

As manufacturers of glassware GILLINDER BROTHERS, INC., have developed:—

"PEARLTONE"—a multi-cased Alabaster diffusing glass
"NEOSTROM" —a multi-cased semi-indirect glass.
"OPOLO" —a single layer (homogeneous) opal or white diffusing glass.

In addition to these types of glass, meeting specific demands in the lighting field, GILLINDER BROTHERS, INC., manufacture other items. These include staple lighting shades and dishes and decorated residential lighting glassware.

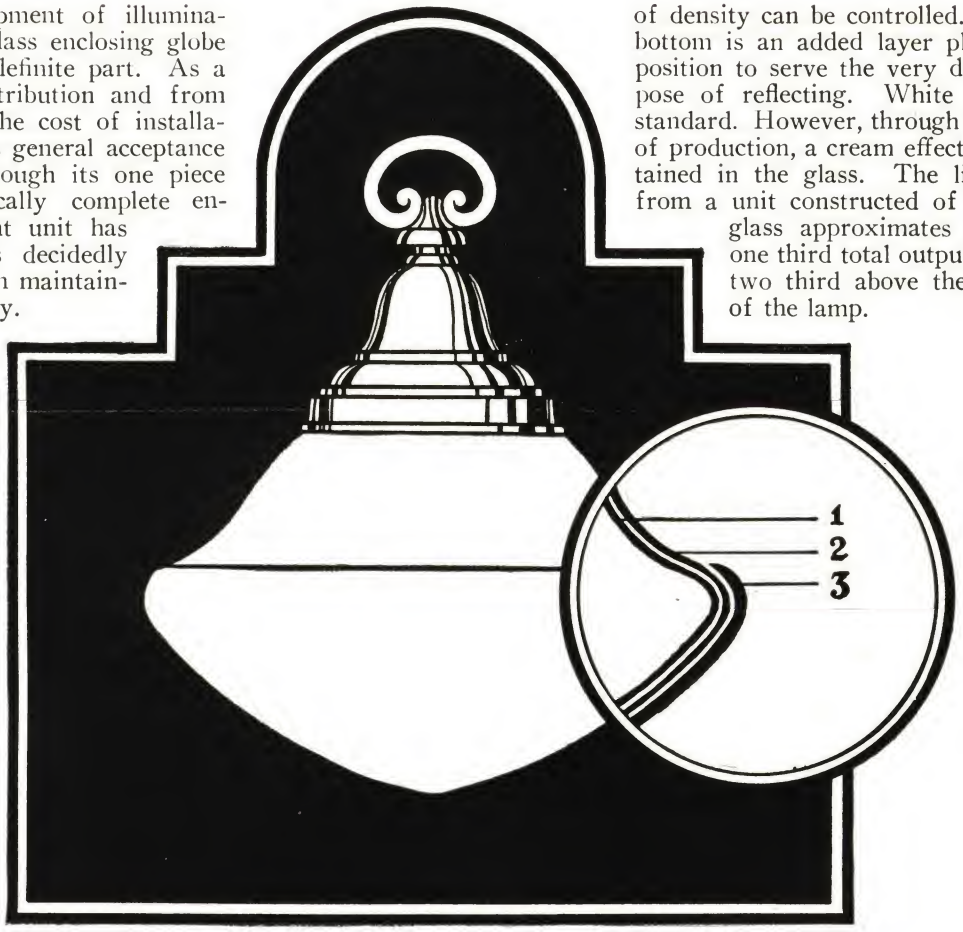
GILLINDER BROTHERS, INC., are equipped to work with you on special lighting effects in glass, where private mould development is involved.

REPRESENTATIVE

NUMERICAL INDEX

NEOSTROM GLASS

With the development of illumination the diffusing glass enclosing globe has played a very definite part. As a means of light distribution and from the view point of the cost of installation and up-keep its general acceptance is recognized. Through its one piece construction, practically complete enclosing, a dust tight unit has resulted. This has decidedly been advantageous in maintaining the light efficiency.



Neostrom Glass—Is a newly developed glass for commercial lighting purposes. This glass now presents the advantages of the enclosing globe in conjunction with the light advantages of semi-indirect illumination. NEOSTROM is cased glass (multi-layer) based on the scientific control necessary to produce cased glass.

(1) A thin skin of opal glass to diffuse light.
(2) A heavy casing of crystal glass to add strength.
(3) A dense opal glass casing to reflect the light upward.

The bowl or lower portion of the enclosing globe in NEOSTROM glass is a dense reflecting opal glass allowing a very small percentage of the light to filter through. The top or neck of the enclosing globe in NEOSTROM glass is constructed of light density Alabaster (cased glass) sufficient to break up direct rays from the source but to allow the light reflected from the bowl to pass through without greatly absorbing it. The accompanying illustration clearly shows the construction of the various layers as referred to.

The density of the top or neck of the globe being dependent upon the structure of the cased glass the degree of density can be controlled. The opal bottom is an added layer placed in its position to serve the very definite purpose of reflecting. White or opal is standard. However, through the method of production, a cream effect can be obtained in the glass. The light output from a unit constructed of NEOSTROM glass approximates a ratio of one third total output below and two third above the horizontal of the lamp.

Hospitals and school boards are recognizing the qualities of NEOSTROM and installations are a part of this recognition.

Advantages of Neostrom Glass

One piece construction a practical dust tight unit.

Mechanically strong (scientifically constructed cased glass).

Will not readily discolor nor disintegrate effecting the maintenance or efficiency after prolonged use.

Surface both inside and outside is smooth and facilitates cleanness.

Possesses the quality of standard type enclosing globes and the ease of installation.

The size as used on the usual commercial installation does not in any way restrict the production of NEOSTROM glass.

Efficient in its performance.

Desirable semi-indirect distribution.

NEOSTROM GLASS

No. 9020

No. 9020/700

No. 991

No. 38

No. 38/701

NEOSTROM GLASS

ELECTRICAL TESTING LABORATORIES
NEW YORK, N. Y.

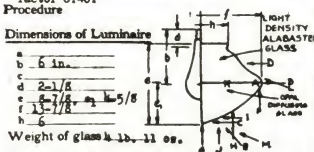
REPORT No. 130257 ORDER No. 49407-S PLATE No. 25341

CANDLEPOWER DISTRIBUTION
NO.9020 NEOSTROM GLASS GLOBE*
Rendered to Gillinder Brothers, Incorporated

No. Submitted - One

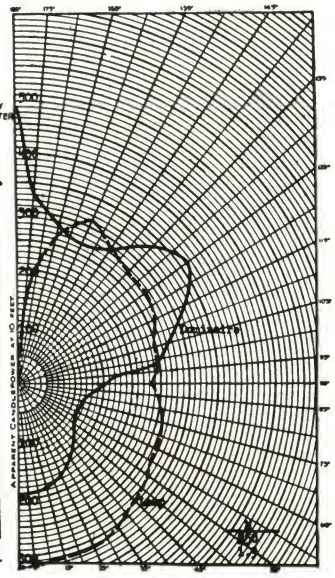
Lamp - 200 Watts; 115 Volts; 3380 Lumens; PS30 Clear Gas-filled Bulb; C-9 Filament; Medium Base; General Service.
Holder
Surface covering globe opening, reflection factor 0.40.
Procedure

Dimensions of Luminaire



a
b 6 in.
c
d 2-1/8
e 6-7/8, or 4-5/8
f 13-7/8
h 6

Weight of glass 4 lb. 11 oz.



LUMINAIRE DISTRIBUTION DATA

Mean Vertical

MID ZONE ANGLES	APPARENT CANDLEPOWER AT 10 FEET	ZONAL LUMENS	MID ZONE ANGLES	APPARENT CANDLEPOWER AT 10 FEET	ZONAL LUMENS
180° ZH	479		90° HZ	149	
175°	337	34	85°	135	147
165°	287	81	75°	117	124
155°	268	124	65°	113	112
145°	284	178	55°	119	107
135°	337	261	45°	137	106
125°	365	325	35°	156	98
115°	323	321	25°	174	81
105°	272	288	15°	185	52
95°	172	206	5°	191	18
			0° NAD	193	

LIGHT FLUX VALUES

ZONE	LUMENS LAMP	LUMENS LUMINAIRE	PERCENT TOTAL LUMENS BARE LAMP	PERCENT LIGHT OUTPUT
0° - 60°	925	462	13.5	
0° - 90°	1732	845	25	
90° - 180°	1648	1818	54	79
0° - 180°	3380	2663	79	

LUMINAIRE BRIGHTNESS

MILLILAMBERTS AND CANDLEPOWER PER SQUARE INCH

Locations	A	B	C	D	E	F	G	H	I	J	K	L
ML.	550	580	805	2430	1020	420	880	645	970	1000	600	1240
Cp per Sq. In.	1.1	1.2	1.6	5.0	2.1	0.9	1.8	1.3	2.0	2.0	1.2	2.5

NOTE: THE ARROWS INDICATE THE LOCATION AND ANGLE OF VIEW *E.T.L. Identification No.4154.

TESTED BY EWS PLOTTED BY MW COMPUTED BY MW CHECKED BY EWS ISSUED Sept. 24th, 1931.

APPROVED BY William F. Little ENGINEER IN CHARGE OF PHOTOMETRY

C. E. Horn IN CHARGE OF TEST

ELECTRICAL TESTING LABORATORIES
NEW YORK, N. Y.

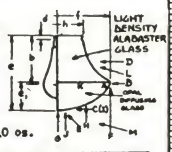
REPORT No. 130257 ORDER No. 49407-S PLATE No. 25342

CANDLEPOWER DISTRIBUTION
NO.38 NEOSTROM GLASS GLOBE*
Rendered to Gillinder Brothers, Incorporated

No. Submitted - One

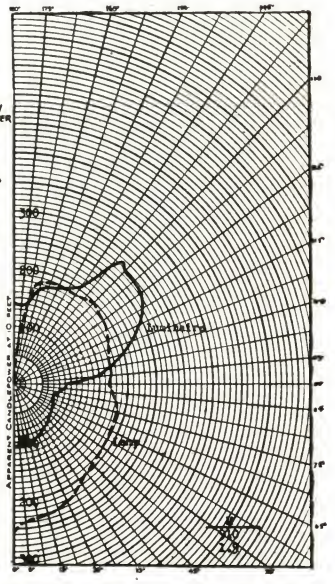
Lamp- 150 Watts; 115 Volts; 2355 Lumens; PS25 Clear Gas-filled Bulb; C-9 Filament; Medium Base; General Service.
Holder
Surface covering globe opening, reflection factor 0.40.
Procedure

Dimensions of Luminaire



a
b 5-1/4 in.
c
d 1/8
e 11-3/8, or 8-7/8
f 11-3/8
h 6

Weight of glass 4 lb. 10 oz.



LUMINAIRE DISTRIBUTION DATA

Mean Vertical

MID ZONE ANGLES	APPARENT CANDLEPOWER AT 10 FEET	ZONAL LUMENS	MID ZONE ANGLES	APPARENT CANDLEPOWER AT 10 FEET	ZONAL LUMENS
180° ZH	140		90° HZ	93	
175°	136	13	85°	90	94
165°	169	47	75°	72	79
155°	181	84	65°	73	73
145°	206	134	55°	79	71
135°	277	215	45°	85	66
125°	275	244	35°	91.5	57
115°	246	244	25°	99	46
105°	193	204	15°	104	29
95°	147	152	5°	107	10
			0° NAD	108	

LIGHT FLUX VALUES

ZONE	LUMENS LAMP	LUMENS LUMINAIRE	PERCENT TOTAL LUMENS BARE LAMP	PERCENT LIGHT OUTPUT
0° - 60°	641	279	12	
0° - 90°	1214	525	22.5	
90° - 180°	1138	1337	56.5	79
0° - 180°	2352	1862	79	

LUMINAIRE BRIGHTNESS

MILLILAMBERTS AND CANDLEPOWER PER SQUARE INCH

Locations	A	B	C	D	E	F	G	H	I	J	K	L
ML.	480	560	560	670	1200	470	1240	650	560	1180	520	740
Cp. per Sq. In.	1.0	1.1	1.1	1.4	2.5	1.0	2.5	1.3	1.1	2.4	1.1	1.5

NOTE: THE ARROWS INDICATE THE LOCATION AND ANGLE OF VIEW *E.T.L. Identification No.4163.

TESTED BY EWS PLOTTED BY MW COMPUTED BY MW CHECKED BY EWS ISSUED Sept. 24th, 1931.

APPROVED BY William F. Little ENGINEER IN CHARGE OF PHOTOMETRY

C. E. Horn IN CHARGE OF TEST

DIMENSIONS

Number	Diameter, inches	Height, inches	Fitter, inches	Recommended wattage
9020 & 9020/700	9⅜	6¾	4	75-100
	12	8⅛	6	150
	14	8⅞	6	200
	16	10¼	6	300
38 & 38/701	10⅜	8	6	100
	12⅜	8	6	150
	14⅜	10	6	200
	16⅜	11¾	6	300
991	12	9	6	150

PEARLTONE GLASS

Pearltone is a scientifically developed glass for use in the field of commercial illumination (enclosing globes) where a high grade product is desirable.

Pearltone — REGISTERED — Gillinder Brothers, Inc.

TRADE-MARK

Pearltone glass is a cased glass of three layer construction (multi-layer) and is often referred to as Alabaster glass. Through a scientific control two varying types of glass, crystal and opal, are brought together into a welded unit of very definite qualities. This control is made possible through a very close laboratory check and a knowledge of the expansion and contraction coefficient in relationship to glass.

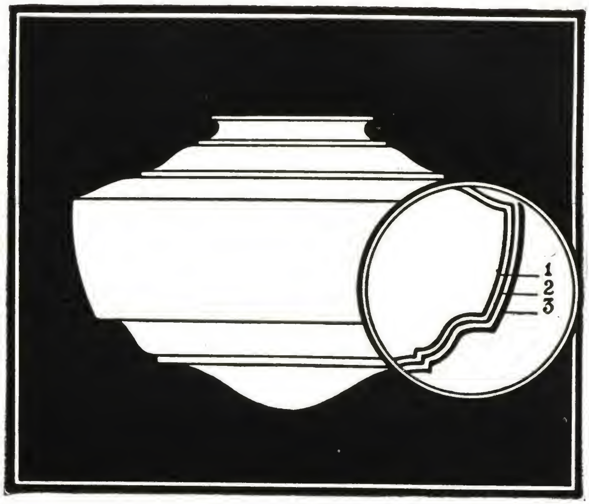
The combination of opal and crystal glass to produce Pearltone is brought about in a manner as here described. The inner and outer layers are crystal glass (clear) and the middle opal glass (white).

As designated on the accompanying illustration

(1) The inside layer of crystal is sufficient to assure an even distribution of:

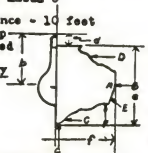
(2) A thin skin of opal which serves the purpose of diffusing the light from the source.

(3) The outside layer of crystal gives strength and body to the finished globe.



ELECTRICAL TESTING LABORATORIES
GENERAL OFFICE AND LABORATORIES
80TH ST AND EAST END AVE.,
NEW YORK, N. Y.
REPORT No. 39780
Rendered to GILLINDER BROTHERS
VERTICAL DISTRIBUTION OF LIGHT
PEARLSTONE ENCLOSING GLOBE NO. 54

Lamp - 200-Watt Mazda C
Holder --
Photometric Distance - 10 feet
Conditions - Lamp
Auxiliary rotated
Dimensions of Lamp and Auxiliary
a
b 6 in.
c
d 1 1/2
e 8 7/8
f 13 3/8

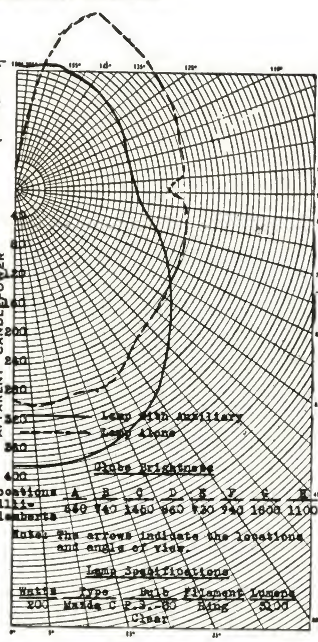


Mid-zone Angles	Distribution Mean Vertical			
	App. Candlepower		Zonal Lumens	
	Lamp Alone	Lamp with Aux.	Lamp Alone	Lamp with Aux.
180° Zenith	29	172		
175°	64.5	168	7	16
165°	223	179	63	50
155°	268	179	122	85
145°	258	179	162	112
135°	255	174	197	135
125°	247	170	222	152
115°	241	164	239	163
105°	233	160	246	169
95°	227	163	246	178
90° Horiz.	213	166		
85°	234	171	251	189
75°	242	203	256	215
65°	246	231	244	229
55°	250	264	224	237
45°	258	300	200	232
35°	276	341	173	214
25°	297	367	136	170
15°	294	380	83	108
5°	299	381	28	36
0° Nadir.	289	381		
Spherical Values	246	214	3099	2688

Light output = 87%.
Weight of glass = 5 lbs. 4-1/2 oz.

Tested by R.C.S.
Computed by C.M.E.
Plotted by L.R.S.
Checked by A.C.D.

Order No. 24238-3
Plate No. 12016
Date July 5th, 1922.



Approved by
Engineer in Charge of Photometry

In Charge of Test.

The Advantages of Pearltone

As previously referred to there are definite Pearltone qualities:

An evenly distributed filtered light from the source.

A high efficiency in light output.

An elimination of direct glare and a minimum of light absorption.

A grayish white quality of illumination.

Ease of maintenance through the glazed surface.

A rugged and durable globe.

An assurance of the Pearltone quality being maintained.

To substantiate these claims Pearltone has been installed in many schools and offices and has been recognized in specifications where the lighting requirements have been carefully considered.

PEARLTONE GLASS

Samuel E. Kennard School, 5031 Potomac Street, St. Louis, Mo., Equipped Throughout with "Pearltone" Unit No. 34

The "Pearltone" Unit No. 34, shown, is one of several especially suitable for installation in schools, other public buildings and offices, where a maximum glareless evenly diffused light is essential

No. 34/438 Tan
DIMENSIONS

Number	Diameter, inches	Height, inches	Fitter, inches	Recommended Wattage
	7⅜	5¾	3¼	50
34	8⅜	6¼	4	75
34/413	9⅜	6⅞	4	75-100
34/438	10⅜	7¾	4-6	100
	11⅜	8½	6	150

No. 34/413 Tan
DIMENSIONS

Number	Diameter, inches	Height, inches	Fitter, inches	Recommended Wattage
	13⅜	9	6	200
34	15⅜	10	6	300
34/413	18⅜	11¼	6-8	500
34/438	20⅜	12	8	750

PEARLTONE GLASS

No. 9524

No. 208

No. 193

No. 200

No. 201

DIMENSIONS

Number	Diameter, inches	Height, inches	Fitter, inches	Recommended wattage
9524	13⅜ 15⅜	9⅞ 11	6 6	200 300
208	14⅝	8⅞	6	200
193	12¼ 14¼	14¼ 16¾	6 6	200 300
201	14⅝	16⅜	6	300
200	12¼ 14¼	5⅝ 7¼	10¼ (opening) 12½ (opening)	

PEARLTONE GLASS

No. 997

No. 888

No.830/430, Tan
No. 830, Undecorated

No. 38

No. 9041/407, *Gothic, Tan
No. 9041, Undecorated

DIMENSIONS

Number	Diameter, inches	Depth, inches	Fitter, inches	Recommended wattage
997	14	10⅜	6	200
830 & 830/430 Tan	6	8	4	75
	7	10	4	100
	8⅜	11⅞	6	150
	10⅜	14½	6	200
	11⅜	16½	6	300
	12	18	6-8	500
38	8⅜	6½	4	75
	10⅜	8	4-6	100
	12⅜	8	6	150
	14⅜	10	6	200
	16⅜	11¾	6	300
	18	12¾	8	500
888	8⅜	6¼	4	75
	9⅜	6⅞	4	75-100
	10⅜	7¾	4-6	100
	11⅜	8⅜	6	150
	13⅜	9	6	200
	14⅜	9½	6	200
	15⅜	10	6	300
	18⅜	12	8	500
9041	8	6	4	75
9041/407	9	7½	4	75-100
9041/406	13	9¾	6	200
9041/403	16	12½	6-8	300
9041/408				

*Also available in Colonial (9041/406), Adam (9041/403) and Classic (9041/408) decoration

OPOLO GLASS

With the wide spread use of the enclosing globe for commercial illumination Gillinder Brothers have developed a highly efficient single piece glass—OPOLO.

This glass meets the needs and requirements for light output and distribution and at the same time has been developed to meet the needs in the competitive field.

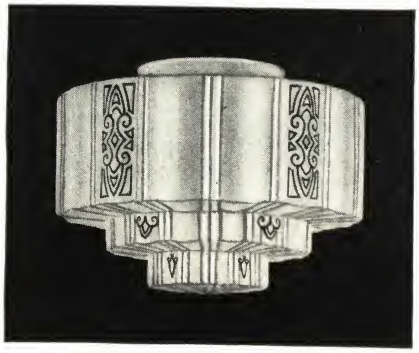
No. 170/497, Black Print
No. 170, Undecorated

No. 207

No. 165/498, Black Print
No. 165, Undecorated

No. 185/497, Black Print
No. 185, Undecorated

No. 205 and No. 209



No. 180/498, Black Print
No. 180, Undecorated

DIMENSIONS

Number	Diameter, inches	Height, inches	Fitter, inches	Recommended wattage
170	6	9	4	60-100
&	9⅝	16⅜	6	300
170/497	11	18	6	500
185 & 185/497	12	9½	6	150
205	13⅜	10½	6	200
209	8½	7	4	75
207	9	16	6	300

Number	Diameter, inches	Height, inches	Fitter, inches	Recommended wattage
165	3⅜	6	3¼	40-60
&	5⅝	9	4	60-100
165/498	7	12	4	150
	9⅝	16¼	6	300
	11	18	6	500
180 & 180/498	12	8⅝	6	150

GLASSWARE FOR COMMERCIAL ILLUMINATION

OPOLO GLASS

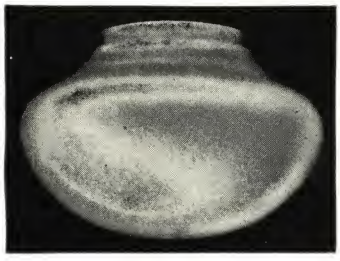
No. 135/435, Tan
No. 135, Undecorated

No. 918/173,
Lined (Black, Blue or Green)
No. 918, Undecorated

No. 71

No. 175/496, Black Print
No. 175, Undecorated

119/479, Tan
No. 119, Undecorated



No. 990

No. 90

DIMENSIONS

Number	Diameter, inches	Height, inches	Fitter, inches	Recommended wattage
135 & 135/435 Tan	8⅜	6⅜	4	75
	9⅜	7¼	4	75-100
	10⅜	7⅞	4-6	100
	12⅜	8¼	4-6	150
	14⅜	8⅞	6	200
	16⅜	10⅛	6	300
918 & 918/173	8½	6⅞	4	75
175 & 175/496	10¾	16⅜	6	300
71	8⅜	6⅜	4	75
	10⅜	7	4-6	100
	12⅜	8½	6	150
	14⅜	9⅞	6	200
	16⅜	10¼	6	300

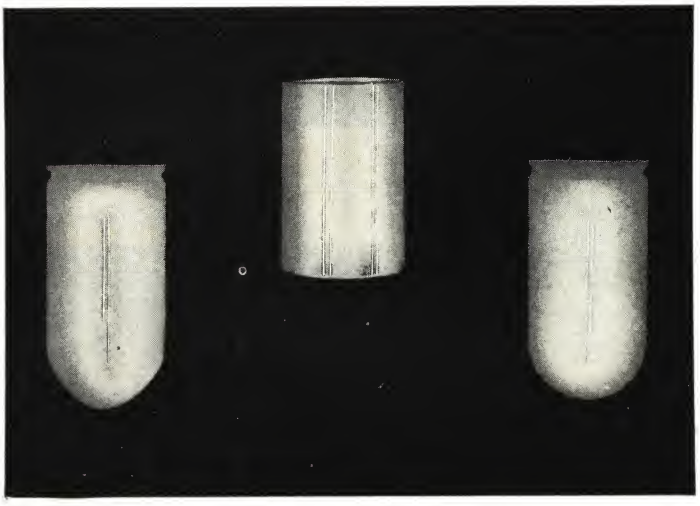
Number	Diameter, inches	Height, inches	Fitter, inches	Recommended wattage
119 & 119/479 Tan	8⅜	6½	4	75
	10⅜	6⅞	4-6	100
	12⅜	7½	4-6	150
	14⅜	8⅝	6	200
	16⅜	10	6	300
	18⅜	12	6-8	500
990	12	8½	6	150
	14	9	6	200
	16	10¼	6	300
90	8⅜	6¼	4	75
	9⅜	6¾	4	75-100
	10⅜	7	4-6	100
	12⅜	7½	4-6	150
	14⅜	8½	6	200
	16⅜	9½	6	300
	18⅜	12	6-8	500

GLASSWARE FOR COMMERCIAL ILLUMINATION

SUNBURSTS

DIMENSIONS

Number	Diameter, inches	Height, inches	Fitter, inches
5013	10	2⅛	2¼
5014	12	1¾	2¼
5020	16	3⅝	2¼
5030	20	4⅜	2¼



No. 862 No. 679 No. 878

STALACTITES AND CYLINDERS

DIMENSIONS

No. 862			No. 878			No. 679	
Dia., in.	Height, in.	Fitter, in.	Dia., in.	Height, in.	Fitter, in.	Dia., in.	*Extreme length, in.
3⅜	6½	3¼	3⅜	6½	3¼	1⅝	20
4	8	4	4	8	4	1⅞	12
5	9	5	4⅞	10⅝	4⅝	2⅜	20
5	16	5	5	9	5	3	16
5½	11	5½	6½	13	6	3½	24
6	14	6	8	16	8	4	54
8	16	8	8	24	8	4½	7
8	24	8	10	16	10	5	20
9	14	9	12	18	12	6	18
10	16	10				7	10
12	18	12				8	20
						9	12
						10	28
						12	17

*Intermediate lengths available.

NO-LIP AND LIP DISHES

No. 683

DIMENSIONS

Dia., in.	8	10	12	14	16	18	20
Depth, in.	3⅛	4	4½	5⅜	5⅝	6¼	7

No. 610

DIMENSIONS

Dia., in.	8	10	12	14	16	18
Depth, in.	4	5	6	7	8	9

No. 634

DIMENSIONS

Dia., in.	8	10	12	14	16	18	20
Depth, in.	3⅛	4	4½	5	5½	6¼	6¾

GLASSWARE FOR COMMERCIAL ILLUMINATION

Nos. 638-643
Nos. 647-651
No. 5721, Electric

No. 608
No. 42

No. 438 Dish
Nos. 747 and 975
Nos. 340-342
No. 611

No. 608/2057 (One side)
No. 608/2058 (Two sides)
No. 9504

Nos. 615, 699, 700
Nos. 346-350
No. 438, Electric

DIMENSIONS

Number	Diam., inches	Depth, inches	Fitter, inches	Recommended wattage
*638	5¼	3¾	2¼	25
*639	6	4⅝	2¼	40
640	7	5¼	2¼	60
641	8	5¾	2¼	100
642	9	6¾	3¼	150
*643	12	7½	3¼	250
647	7	2¾	2¼	40
648	8	3½	2¼	60
649	9	4	2¼	100
*650	11	4⅞	2¼	150
*651	11	4⅞	3¼	150
5721 Electric	4⅝	5	2¼	40
**608	5	..	3¼	..
**608	6	..	3¼	..
**608	7	..	3¼	..
**608	8	..	4	..

Number	Diam. inches	Depth, inches	Fitter, inches	Recommended wattage
**608	9	..	6	..
**608	10	..	4, 5	..
**608	12	..	4, 5, 6	..
**608	14	..	6, 8	..
**608	16	..	6, 8	..
**608	18	..	8, 10	..
**608	20	..	8	..
42	5½	3⅜	2¼	40
438 Dish	12	5	10	..
438 Dish	16	6¾	14	..
747	4¾	4⅝	2¼	40
975	6⅛	5	2¼	40
975	7	5¼	2¼	60
340	6	4½	2¼	40
341	7	5⅛	2¼	60
342	8	5⅞	2¼	100

Number	Diam. inches	Depth, inches	Fitter, inches	Recommended wattage
**611	6	4½	3¼	..
**611	7	5	3¼	..
**611	8	5	4	..
**611	10	6⅜	4	..
608/2057	6	..	3¼	..
608/2057	8	..	4	..
9504	5⅝	3½	2¼	40
615	6	4	2¼	40
699	7	5	2¼	60
700	8	5	2¼	100
346	7	2¾	2¼	25
347	7½	3⅝	2¼	40
348	9	3⅞	2¼	60
*349	11	4⅝	2¼	100
*350	11	4⅝	3¼	100
438 Electric	4¾	5	2¼	40

* Not carried in stock.

** Other size fitters available on No. 608 and No. 611. Information on request.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